

Water Restriction Policy

If the Asheville area's water supply becomes so limited that unrestricted water use may endanger the adequacy or quality of the water supply, then the city may, by resolution, adopt such emergency water use restrictions and such additional regulations and restrictions including, without limitation, water rationing and/or increased rates, as are reasonably calculated to conserve and protect the water supply. Emergency water use regulations and restrictions remain in force and effect until the city determines that the conditions requiring their imposition no longer exist.

Background

In 1998, Asheville experienced below average rainfall with water supply reservoirs at the lowest levels in recorded history. The Water Resources Department along with the community united in efforts to aggressively reduce water consumption. A drought management plan was developed by staff and was successful in reducing water consumption. Eventually, conservation measures aided in restoring reservoirs and water plants to full capacity.

In 1999, in response to the search for an additional source of water in the region, the city brought on-line a new water treatment plant which began producing 5 million gallons of water per day, which have changed the triggers that point to water shortages. The City of Asheville uses the number of days of water supply remaining as the key indicator in its drought plan.

Water Conservation Stages

Stage I – Continuing Voluntary Conservation Practices

Stage II – Voluntary Conservation

Stage III – Moderate Mandatory Conservation

Stage IV- Severe Mandatory Conservation

Stage V – Emergency Restrictions

Stage VI – Water Rationing

I Stage – Continuing Voluntary Conservation Practices

Customers are encouraged to observe water conservation measures to reduce water use, on a daily basis

- The Water Efficiency Division of the Water Resources is responsible for conservation presentations given to students, teachers and civic groups throughout the year
- Water saving retrofit kits are available from the city Customer Services Division for a nominal fee
- Water Resources has a contract with the Land-Of-Sky Regional Council for the Waste Reduction Partners program. In this program volunteer engineers perform water reduction assessments for local businesses and industry
- Ongoing water conservation campaigns are used such as the 10 Gallon Challenge, Consider the Future: Conserve for Life and water bill inserts
- Water Resources department presents workshops for industrial, commercial, institutional and residential customers

- Water Conservation tips are on the City of Asheville web site – www.ashevillenc.gov/water/restrictions.htm

Thirty Things You Can Do To Save Water

In the bathroom...

1. Shorten your shower. A one or two minute reduction can save up to 700 gallons of water each month. If possible take a shallow bath instead of a shower for even greater water savings.
2. Replace your showerhead with low-flow showerheads or install flow restrictors. (Available at City of Asheville's Customer Services Division)
3. Put trash in the wastebasket, cigarettes in the ashtray – don't flush! Each time you flush a small bit of trash you waste five to seven gallons of water.
4. Check for leaks in your toilets. Drop a dye tablet in your toilet tank or add a few drops of food coloring and let stand for at least three hours. If the color begins to appear in the bowl without flushing, your toilet has a leak and could be wasting thousands of gallons of water each year. Repair those leaks! Dye tablets are available upon request.
5. When brushing your teeth, wet your toothbrush, then, turn off the water.
6. Rinse your razor in a partially filled sink instead of under a running tap.
7. Check faucets and pipes for leaks. Replace worn washers. Small drips from worn washers can waste 20 or more gallons a day. Large leaks can waste hundreds.
8. Put a plastic bottle in your toilet. Fill the bottle with water and a small amount of pebbles (to weigh it down) and place it in your tank, away from operating mechanisms. Your plastic bottle works like a displacement bag. If you are interested in a displacement bag, please call the city for more information at 259-5414.
9. While waiting for your bath water to get warm, place a bucket under the faucet to catch the cold water and then use it to water your plants.
10. Building or remodeling your home? Ask your builder to install ultra-low flush (U.L.F.) toilets and faucets.

In the kitchen and laundry...

11. Keep a bottle of water in the refrigerator for drinking. Don't run the tap waiting for cold water.
12. Rinse vegetables in a pan of water – not under a running tap.
13. Use your dishwasher and washing machine for full loads only.
14. Never leave the water running if you wash dishes by hand. Fill one sink with soapy water and one with clear water. If you have only one sink use a dish rack and rinse with hot water.
15. Use the smallest amount of detergent possible when washing dishes by hand. This reduces the amount of water needed.
16. Check your kitchen/bath pipes and faucets for leaks and replace worn washers immediately.
17. Use the garbage disposal less and the garbage can more often. Better yet, compost!
18. Defrost frozen foods in the microwave or refrigerator, instead of under running water.

Outdoors...

19. Water your lawn in the early morning or evening when there is less evaporation.
20. Plant drought-resistant native trees and plants. There are many beautiful plants and trees that thrive on small amounts of water.
21. Don't let your children play with the hose and sprinklers.

22. Place a layer of mulch around trees and plants. Mulch slows evaporation of moisture and discourages weed growth.
23. Don't water your lawn on a windy day to prevent excessive evaporation.
24. Set lawn mower blades on notch higher since longer grass means less evaporation.
25. If you have a pool, use a pool cover to cut down on evaporation.
26. Don't water the sidewalk. Adjust sprinklers so they miss the sidewalks, driveway, and street.
27. Water only when your lawn really needs it. If the grass springs back after you step on it, there is no need to water it. (If you'd like to install a water-efficient irrigation system, call a landscape architect – 85% of all landscape problems are directly related to over watering.)
28. Check for leaks in hoses, faucets, pipes and couplings. Outside leaks can waste just as much as those inside.
29. Sweep sidewalks and driveways. Don't hose them down.
30. Wash your car with a pail of soapy water, not a running hose. Use the hose for rinsing only.

Stage II – Voluntary Conservation Trigger – Days of Supply reach 180

Customers are encouraged to observe the recommendations of Stage I and to increase the conservation level as follows:

Household Use

- Obtain retrofit kits from the city's Customer Services Division
 - Low water aerated shower head for showers
 - Toilet displacement bag for reduced water toilet flushing
 - Garden hose spray gun
- Adjust water setting when washing clothes
- Wash dishes with full load and use energy saver setting
- Turn off faucets while brushing teeth
- Use a sink and tub stopper to avoid wasting water
- Take shorter showers and baths

Lawn Watering

- Water lawns and gardens only in late evenings (after 7:00pm) or early mornings (before 10:00am) to reduce waste from evaporation
- Check plants daily but only water when they begin to show stress
- Use spray gun or nozzle to keep water off when moving the garden hose

Car Washing

- Reduce frequency of vehicle washing – waxing car can protect finish with less frequent washing necessary
- Use car wash facilities which practice recycling of water
- If washing at home, use soap bucket and sponge to wash, and spray gun only for rinsing

Industry

- Optimize recycling of heating or cooling system water to minimize make-up
- Consider closed loop or recycle use of water in wet processes when possible

- Contact Water Efficiency Division for free technical consulting through WRP (Waste Reduction Partners) Program
- Practice household use tips and lawn watering tips for domestic and irrigation needs
- Cease operation of decorative fountains, pool, etc, except where water is recycled
- Identify and repair all leaky fixtures and water-using equipment

Water Resources Department

- Strict accountability for water use at Water Treatment Plants
 - Minimize make-up water required for chemicals
 - Watch filtered turbidity and head loss carefully
 - Watch water use during filter backwash
- Strict monitoring of SCADA to prevent reservoirs from running over, check calibration of levels at all reservoirs and control valves to insure SCADA accuracy
- Place special emphasis in Water Maintenance work planning on repairing water leaks
 - Overtime work with proven productivity
 - Contract work
 - Construction Crew concentrate solely on leak repairs except approval otherwise of Director
- Cease use of equipment wash rack at Water Maintenance; keep front grill cleaned to permit proper use of radiator but otherwise cease washing of vehicles during drought alert
- Ask customers applying for new taps how long they can wait for tap to focus as much as possible on leak repairs
- Run flow tests for water availability only when necessary, and run water for minimum necessary when testing required
- Flow fire hydrants only for protection of public health (i.e., maintain chlorine residual or after line shutdown) or fire fighting; no routine flow testing. When flushing is required, monitor closely and don't leave running longer than necessary
- Evaluate reduced frequency of "dead-end" flushing program but check chlorine residual closely to insure water quality not affected

Other City and County Departments

- Cease flow testing of fire hydrants by all Fire Departments in service area as long as drought alert exist
- Cease street flushing except for situations where public health or safety at risk
- Cease operation of decorative fountains, pools, etc, except where water is recycled
- Minimize water use in construction practices and encourage same from contractors
- Practice household use tips and lawn watering tips for domestic and irrigation needs
- Reduce watering of public golf courses to only when absolutely necessary to save sod
- Cease use of vehicle washing facilities that do not recycle water
- Identify and repair all leaky fixtures and water-using equipment

Metropolitan Sewerage District

- Reuse effluent for wash down processes
- Eliminate all water used for landscaping
- All industrial water use (power) is pulled from the French Broad River

NC Department of Transportation

- Eliminate tanker use of water except when absolutely necessary
- Pump water from creeks and streams to wet down construction area

Stage III – Moderate Mandatory Conservation Trigger – Days of Supply reach 150

Customers shall be encouraged to observe the recommendations of Stage I and II, and the level of the conservation effort shall be increased to require the following mandatory measures.

Household use

- Obtain retrofit kits from the city's Customer Services Division
 - Low water aerated shower head for showers
 - Toilet displacement bag for reduced water toilet flushing
 - Garden hose spray gun
- Adjust water setting when washing clothes
- Wash dishes with full load and use energy saver setting
- Turn off faucets while brushing teeth
- Use a sink and tub stopper to avoid wasting water
- Take shorter showers and baths

Lawn Watering

- Do not water any plants, including grass, flowers, shrubs, trees, or other vegetation directly from water tap- capture water to reuse for your potted plants
- Do not use sprinklers
- Use mulch around plants and between rows to hold in moisture

Car Washing

- No washing of vehicles at home
- Use car wash facilities which practice recycling of water and wash only when necessary

Industry

- Optimize recycling of heating or cooling system water to minimize make-up
- Consider closed loop or recycle use of water in wet processes when possible
- Contact Water Efficiency Division for free technical consulting through WRP (Waste Reduction Partners) Program
- Practice household use tips and lawn watering tips for domestic and irrigation needs
- Cease operation of decorative fountains, pool, etc, except where water is recycled
- Identify and repair all leaky fixtures and water-using equipment

Water Resources Department

- Strict accountability for water use at Water Treatment Plants
 - Minimize make-up water required for chemicals

- Watch filtered turbidity and head loss carefully
 - Watch water use during filter backwash
- Strict monitoring of SCADA to prevent reservoirs from running over, check calibration of levels at all reservoirs and control valves to insure SCADA accuracy
- Place special emphasis in Water Maintenance work planning on repairing water leaks
 - Overtime work with proven productivity
 - Contract work
 - Hydrant & Valve Crew concentrate solely on leak repairs except approval otherwise of Director
- Cease use of equipment wash rack at Water Maintenance; keep front grill cleaned to permit proper use of radiator but otherwise cease washing of vehicles during drought alert
- Ask customers applying for new taps how long they can wait for tap to focus as much as possible on leak repairs
- Run flow tests for water availability only when necessary, and run water for minimum necessary when testing required
- Flow fire hydrants only for protection of public health (i.e., maintain chlorine residual or after line own) or fire fighting; no routine flow testing. When flushing required, monitor closely and don't leave running longer than necessary
- Evaluate reduced frequency of "dead-end" flushing program but check chlorine residual closely to insure water quality not affected

Other City and County Departments

- Cease flow testing of fire hydrants by all Fire Departments in service area as long as drought alert exists
- Cease street flushing except for situations where public health or safety at risk
- Cease operation of decorative fountains, pools, etc, except where water is recycled
- Minimize water use in construction practices and encourage same from contractors
- Practice household use tips and lawn watering tips for domestic and irrigation needs
- Reduce watering of public golf courses to only when absolutely necessary to save sod
- Cease use of vehicle washing facilities that do not recycle water
- Identify and repair all leaky fixtures and water-using equipment

Metropolitan Sewerage District

- Reuse effluent for wash down processes
- Eliminate all water used for landscaping
- All industrial water use (power) is pulled from the French Broad River
- Use reclaimed water from WWTP for sewer line flushing when practical

NC Department of Transportation

- Eliminate tanker use of water except when absolutely necessary
- Pump water from creeks and streams to wet down construction area

Stage IV – Severe Mandatory Conservation Trigger – Days of Supply reach 120

Customers shall be encouraged to observe the conservation measures in Stage I, Stage II and Stage III. The level of the conservation effort shall increase to require the following additional mandatory measures:

- Hotels and motels shall provide notices for all guests of water restrictions and provide tips and request water conservation measures. (See attached table cards provided to hotels and motels by the Water Resources Department)
- All public transportation businesses will post and maintain notice of water restrictions and water-saving tips for review by its passengers. This includes all buses and taxis. (See attached 11"x 17" conservation posters provided to public transportation businesses by the Water Resources Department)
- Restaurants shall not serve water with meals unless specifically requested by the customer. (See attached 5"x 8" conservation posters provided to restaurants and other businesses by the Water Resources Department)
- Apartments, mobile home parks, condominiums, townhouses, and commercial parks with "master metered" water service are required to issue a notice to each tenant which provides the water restrictions and suggestions for conserving water and request these conditions be followed.
- All new applications for a Commitment of Water Availability and all new applications for a Connection to the Water System which is not accompanied by a valid Letter of Commitment issued prior to Stage IV, which meet all conditions for approval under these policies, shall be approved with the condition that water service will not be provided until the Director declares that Stage IV Drought Emergency has ended.

Stage V – Stringent Mandatory Conservation Trigger – Days of supply reach 90

Customers shall be encouraged to observe the conservation measures in Stages I, II, III and IV. The level of the conservation effort shall increase to require the following additional measures: All customers of the City of Asheville shall be subject to a surcharge of \$1.40 per one hundred cubic feet ccf) in addition to the charges of the current fee schedule for all water consumption which exceeds the following amounts:

- All water consumption greater than 10ccf (7,480 gallons) per two-month billing cycle for all single-family residential Customers *with the exception being 1) a single-family residential customer who has used greater than 10ccf in a two-month billing cycle, but who has provided a written verification to the Water Resources Department that their usage is 80% or less of their average for the past 12 months 2) and whose water consumption is less than 40 gallons per day per person permanently residing at the Premises. The director will credit the billed surcharges back to the account upon confirmation. However, such Customers shall initially pay their bill, including surcharges, by the due date. No written verification will be considered beyond 90 days after the Stage V Drought Emergency has ended.*
 - Non-residential Customers may obtain an exemption from the Director, from the payment of surcharges, if **1)** the Customer has had a comprehensive water efficiency audit performed by the city or **2)** an independent and qualified firm, approved by the Director, with the auditing firm certifying that the recommendations of such audit have been substantially implemented, and the Customer's chief executive officer certifies in writing that the water efficiency recommendations are consistently practiced in the daily water use of the Premises.
- All surcharges assessed on a water bill for a meter reading cycle in which some time either precedes or follows the effective period of these surcharges shall be prorated for the percentage of the number of calendar days in which the surcharges are effective.
 - Violation: A Customer's water service may be terminated for any violation of the city's water use restrictions program, and the customer shall be subject to all other penalties, civil or criminal, provided by law.
 - Stage V restrictions, including surcharges, would remain in effect until sufficient recovery of water supply is achieved.

Stage VI – Water Rationing Trigger – Days of supply reach 60

In the event that water supplies reach a level so low that available treatable water storage reaches less than 60 days of supply, Stage VI may have to be implemented

- Strict rationing of water to all customers
- Prohibition of all non-essential water uses

RETURN TO NORMAL

- The City of Asheville will adopt a resolution lifting each stage of conservation as the water supply recovers to that level, except Stage 1, which is Continuing Voluntary Conservation Practices. The Water Resources Director will announce a detailed review covering reservoir recovery and water supply.
- The Water Resources Department will continue to closely monitor water levels
- The Water Resources Director will express appreciation to all water customers who have practiced conservation and patience
- A Press Release will be issued immediately as each stage is lifted